CONTENTS OF HEREDITAS, VOLUME 141 (2004)

166 Bjørnstad, Å., Grønnerød, S., Mac Key, J., Tekauz, A., Crossa, J. and Martens, H.
Resistance to barley scald (*Rhynchosporium secalis*) in the Ethiopian donor lines 'Steudelli' and 'Jet', analyzed by partial least squares regression and interval mapping

149 Bjørnstad, Å., Westad, F. and Martens, H.
Analysis of genetic marker-phenotype relationships by jack-knifed partial least squares regression (PLSR)

252 Brinn, M. N. A., Porto, J. I. R. and Feldberg, E.
Karyological evidence for interspecific hybridization between *Cichla monoculus* and *C. temensis* (Perciformes, Cichlidae) in the Amazon

216 Brown, Jr, K. S., von Schoultz, B. and Suomalainen, E.
Chromosome evolution in Neotropical Danainae and Ithomiinae (Lepidoptera)

293 Carlsson, M., Bothmer, R. von. and Merker, A.
Screening and evaluation of resistance to downy mildew (*Peronospora parasitica*) and clubroot (*Plasmodiophora brassicae*) in genetic resources of *Brassica oleracea*

258 Corujo, M., Blanco, G., Vázquez, E. and Sánchez, J. A.
Genetic structure of northwestern Spanish brown trout (*Salmo trutta* L.) populations, differences between microsatellite and allozyme loci

288 Evtushenko, E. V. and Chekurov, V. M.
Inheritance of the light intensity response in spring cultivars of common wheat

328 Fernandes, C. A. and Martins-Santos, I. C.
Cytogenetic studies in two populations of *Astyanax altiparanae* (Pisces, Characiformes)

81 Frello, S., Ørgaard, M., Jacobsen, N. and Heslop-Harrison, J. S.
The genomic organization and evolutionary distribution of a tandemly repeated DNA sequence family in the genus *Crocus* (Iridaceae)

94 Golub, N. and Nokkala, S.
Chromosome numbers of two sucking louse species (Insecta, Phthiraptera, Anoplura)

243 Han, F. P., Liu, Z. L., Tan, M., Hao, S., Fedak, G. and Liu, B.
Mobilized retrotransposon *Tos17* of rice by alien DNA introgression transposes into genes and causes structural and methylation alterations of a flanking genomic region

115 Joshi, S. K., Sharma, S. N., Singhania, D. L. and Sain, R. S.
Combining ability in the F_1 and F_2 generations of diallel cross in hexaploid wheat (*Triticum aestivum* L. em. Thell)

272 Kandemir, N., Yildirim, A., Kudrna, D. A., Hayes, P. M. and Kleinhofs, A.
Marker assisted genetic analysis of non-brittle rachis trait in barley

237 Kavalco, K. F., Pazza, R., Bertollo, L. A. C. and Moreira-Filho, O.
Heterochromatin characterization of four fish species of the family Loricariidae (Siluriformes)

142 Klumpp, A., Ansel, W., Fomin, A., Schnirring, S. and Pickl, C.
Influence of climatic conditions on the mutations in pollen mother cells of *Tradescantia* clone 4430 and implications for the Trad-MCN bioassay protocol

186 Kolodinska Brantestam, A., von Bothmer, R., Dayteg, C., Rashal, I., Tuvesson, S. and Weibull, J.
Inter simple sequence repeat analysis of genetic diversity and relationships in cultivated barley of Nordic and Baltic origin

68 Komatsuda, T. and Tanno, K.
Comparative high resolution map of the six-rowed spike locus 1 (*vrs1*) in several populations of barley, *Hordeum vulgare* L.

CONTENTS OF HEREDITAS, VOLUME 141 (2004)

166 Bjørnstad, Å., Grønnerød, S., Mac Key, J., Tekauz, A., Crossa, J. and Martens, H.
Resistance to barley scald (*Rhynchosporium secalis*) in the Ethiopian donor lines 'Steudelli' and 'Jet', analyzed by partial least squares regression and interval mapping

149 Bjørnstad, Å., Westad, F. and Martens, H.
Analysis of genetic marker-phenotype relationships by jack-knifed partial least squares regression (PLSR)

252 Brinn, M. N. A., Porto, J. I. R. and Feldberg, E.
Karyological evidence for interspecific hybridization between *Cichla monoculus* and *C. temensis* (Perciformes, Cichlidae) in the Amazon

216 Brown, Jr, K. S., von Schoultz, B. and Suomalainen, E.
Chromosome evolution in Neotropical Danainae and Ithomiinae (Lepidoptera)

293 Carlsson, M., Bothmer, R. von. and Merker, A.
Screening and evaluation of resistance to downy mildew (*Peronospora parasitica*) and clubroot (*Plasmodiophora brassicae*) in genetic resources of *Brassica oleracea*

258 Corujo, M., Blanco, G., Vázquez, E. and Sánchez, J. A.
Genetic structure of northwestern Spanish brown trout (*Salmo trutta* L.) populations, differences between microsatellite and allozyme loci

288 Evtushenko, E. V. and Chekurov, V. M.
Inheritance of the light intensity response in spring cultivars of common wheat

328 Fernandes, C. A. and Martins-Santos, I. C.
Cytogenetic studies in two populations of *Astyanax altiparanae* (Pisces, Characiformes)

81 Frello, S., Ørgaard, M., Jacobsen, N. and Heslop-Harrison, J. S.
The genomic organization and evolutionary distribution of a tandemly repeated DNA sequence family in the genus *Crocus* (Iridaceae)

94 Golub, N. and Nokkala, S.
Chromosome numbers of two sucking louse species (Insecta, Phthiraptera, Anoplura)

243 Han, F. P., Liu, Z. L., Tan, M., Hao, S., Fedak, G. and Liu, B.
Mobilized retrotransposon *Tos17* of rice by alien DNA introgression transposes into genes and causes structural and methylation alterations of a flanking genomic region

115 Joshi, S. K., Sharma, S. N., Singhania, D. L. and Sain, R. S.
Combining ability in the F_1 and F_2 generations of diallel cross in hexaploid wheat (*Triticum aestivum* L. em. Thell)

272 Kandemir, N., Yildirim, A., Kudrna, D. A., Hayes, P. M. and Kleinhofs, A.
Marker assisted genetic analysis of non-brittle rachis trait in barley

237 Kavalco, K. F., Pazza, R., Bertollo, L. A. C. and Moreira-Filho, O.
Heterochromatin characterization of four fish species of the family Loricariidae (Siluriformes)

142 Klumpp, A., Ansel, W., Fomin, A., Schnirring, S. and Pickl, C.
Influence of climatic conditions on the mutations in pollen mother cells of *Tradescantia* clone 4430 and implications for the Trad-MCN bioassay protocol

186 Kolodinska Brantestam, A., von Bothmer, R., Dayteg, C., Rashal, I., Tuvesson, S. and Weibull, J.
Inter simple sequence repeat analysis of genetic diversity and relationships in cultivated barley of Nordic and Baltic origin

68 Komatsuda, T. and Tanno, K.
Comparative high resolution map of the six-rowed spike locus 1 (*vrs1*) in several populations of barley, *Hordeum vulgare* L.

61 Koskinen, M. T., Hirvonen, H., Landry, P.-A. and Primmer, C. R.
The benefits of increasing the number of microsatellites utilized in genetic population studies: an empirical perspective

19 Krahulcová, A., Papoušková, S. and Krahulec, F.
Reproduction mode in the allopolyploid facultatively apomictic hawkweed *Hieracium rubrum* (Asteraceae, *H.* subgen. *Pilosella*)

323 Lal Ahamed, M., Singh, S. S., Sharma, J. B. and Ram, R. B.
Evaluation of inheritance to leaf rust in wheat using area under disease progress curve

55 Li, L., Arumuganathan, K., Gill, K. S. and Song, Y.
Flow sorting and microcloning of maize chromosome 1

135 Molina, M. del C., García, M. D., López, C. G. and Ferrero, V. M.
Meiotic pairing in the hybrid (*Zea diploperennis* × *Zea perennis*) × *Zea mays* and its reciprocal

333 Ocalewicz, K.
Cytogenetic analysis of platyfish (*Xiphophorus maculatus*) shows location of major and minor rDNA on chromosomes

74 Pálsson, S.
On the effects of background selection in small populations on comparisons of molecular variation

15 Peng, Z.-S., Yang, J., Wei, S.-H. and Zeng, J.-H.
Characterization of the common wheat (*Triticum aestivum* L.) mutation line producing three pistils in a floret

301 Persson Hovmalm, H. A., Jeppsson, N., Bartish, I. V. and Nybom, H.
RAPD analysis of diploid and tetraploid populations of *Aronia* points to different reproductive strategies within the genus

122 Prieto, P., Martín, A. and Cabrera, A.
Chromosomal distribution of telomeric and telomeric-associated sequences in *Hordeum chilense* by in situ hybridization

318 Raposo, A., Carvalho, C. R. and Otoni, W. C.
Statistical and image analysis of sister chromatid exchange in maize

180 Remis, M. I., Pensel, S. and Rosetti, N.
Interaction among different heterocromatic variants in the grasshopper *Dichroplus elongatus*

97 Rosenbusch, B.
The incidence of aneuploidy in human oocytes assessed by conventional cytogenetic analysis

313 Säll, T., Lind-Halldén, C., Jakobsson, M. and Halldén, C.
Mode of reproduction in *Arabidopsis suecica*

89 Santos-Colares, M. C. and Valente, V. L. S.
Meiosis in *Drosophila willistoni* and *D. paulistorum* females

106 Singh, H., Sharma, S. N. and Sain, R. S.
Heterosis studies for yield and its components in bread wheat over environments

39 Sjakste, T. and Röder, M.
Distribution and inheritance of β-amylase alleles in north European barley varieties

31 Souza, M. M., Palomino, G., Pereira, T. N. S., Pereira, M. G. and Viana, A. P.
Flow cytometric analysis of genome size variation in some *Passiflora* species

46 Sun, M., Yan, Y., Jiang, Y., Xiao, Y., Hu, Y., Cai, M., Li, Y., Hsam, S. L. K. and Zeller, F. J.
Molecular cloning and comparative analysis of a y-type inactive HMW glutenin subunit gene from cultivated emmer wheat (*Triticum dicoccum* L.)

199 Vandewoestijne, S. and Baguette, M.
Genetic population structure of the vulnerable bog fritillary butterfly

8 Vijayan, K., Awasthi, A. K., Srivastava, P. P. and Saratchandra, B.
Genetic analysis of Indian mulberry varieties through molecular markers

2 Wang, C., Zhang, S. and Chu, J.
G-banding patterns of the chromosomes of amphioxus *Branchiostoma belcheri tsingtauense*

128 Wu, J. G., Shi, C. H., Zhang, X. M. and Katsura, T.
Genetic analysis of non-essential amino acid contents in rice (*Oryza sativa* L.) across environments

207 Xu, S.-X., Liu, J. and Liu, G.-S.
The use of SSRs for predicting the hybrid yield and yield heterosis in 15 key inbred lines of Chinese maize

278 Zehdi, S., Trifi, M., Marrakchi, M. and Pintaud, J. C.
Genetic diversity of Tunisian date palms (*Phoenix dactylifera* L.) revealed by nuclear microsatellite polymprphism

193 Zhao, H., Wang, R., Guo, A., Hu, S. and Sun, G.
Development of primers specific for LMW-GS genes located on chromosome 1D and molecular characterization of a gene from *Glu-D3* complex locus in bread wheat